

permeating light. That is, the lighting unit **10** may be used as a backlight of the liquid crystal display panel. Further, the lighting unit **10** may be used as a luminous source for another lighting unit or another display unit.

[0048] A plurality of the organic EL elements **14** may be electrically connected in series. The plurality of organic EL elements **14** includes all the organic EL elements **14**. In such a construction, the same amount of electric current passes through the organic EL elements **14** which are connected in series, thereby being capable of roughly equalizing an amount of light emitted from each organic EL element **14**, for brightness of the organic EL element **14** is generally proportional to an amount of electric current passing through the organic EL element **14**.

[0049] For elements, such as inorganic EL elements, driven by voltage, when the elements are connected in parallel, the same magnitude of voltage is applied to each element.

[0050] It is noted that a method of electrically connecting each organic EL element **14** is not limited to the above-mentioned example, and each organic EL element **14** may be driven independently. In addition, sets of the organic EL elements **14**, which are connected to each other in series, may be connected in parallel. Further, sets of the organic EL elements **14**, which are connected to each other in parallel, may be connected in series.

[0051] The protective film **18** is formed so as to cover portions other than the surfaces of the first electrode **15**, the organic EL layer **16** and the second electrode **17**, which are adjacent to each other. The protective film **18** is made of a material which at least prevents permeation of water content (water vapor) and oxygen. For the material of the protective film **18**, for example, silicon oxide, silicon nitride and polysilazane are used. The protective film **18** can have another function that protects the organic EL element **14** from external pressure. Also, the protective film **18** can have yet another function that protects the organic EL element **14** from gas other than the gas mentioned above.

[0052] It is noted that a sealed can may be provided in place of the protective film **18** (passivation film). Alternatively, the sealed can may be provided together with the protective layer **18**.

[0053] As shown in FIG. 1, the lighting unit **10** is constructed so that each panel **11** adheres to the adjacent panels **11** at least in the end faces of the respective transparent substrates **13** by the adhesive **12** that functions as an adhesive means and also a light scattering means. The adhesive **12** is a solidified member thereof and is hereinafter referred to an adhesive.

[0054] The adhesive **12** functions as an adhesive means for joining the adjacent panels **11** and also functions as a light scattering means for scattering the light entered from the panel **11**. The adhesive **12** closely adheres to the transparent substrate **13**, and a large amount of the light which is emitted from portions of the transparent substrate **13** of the panel **11**, other than the light exit surface **13a**, reaches the end face of the transparent substrate **13**. The light which has reached the end face of the transparent substrate **13** enters the adhesive **12**. A traveling direction of the light thus having entered the adhesive **12** is varied by the light scattering means. A part of the light is emitted from the adhesive **12** to

the outside of the lighting unit **10** (in a light exit direction), and another part of the light enters the transparent substrate **13** again. Since a traveling direction of the light having entered the transparent substrate **13** is varied relative to the light exit surface **13a** by the light scattering means, a part of the light or all the light is emitted from the light exit surface **13a** to the outside of the lighting unit **10**.

[0055] The adhesive **12** contains in a main portion thereof a member such as transparent beads or air bubbles, whose refractive ratio is different from that of the main portion. The adhesive **12** also contains in the main portion thereof a member having a light reflecting performance, such as powdered ceramics or powdered metal. Thus, the adhesive **12** has a function for scattering light. In the present embodiment, when the adjacent panels **11** adhere to each other, the adhesive **12** does not perform an optical absorption. When the adhesive **12** congeals, the adhesive **12** becomes clouded. It is noted that the adhesive **12** does not need to become clouded when the adhesive **12** congeals. Unless the adhesive **12** absorbs light, the adhesive **12** is capable of having a light scattering function by scattering particulates which reflect or refract light.

[0056] It is also noted that a reflecting member may be provided on the side of the light incidence surface **13b** of the adhesive **12** relative to the transparent substrate **13**.

[0057] On the light exit surface **13a** of the transparent substrate **13**, a scattering member **19** is preferably adhered. The scattering member **19** may be only mounted on the light exit surface **13a** of the transparent substrate **13**. The scattering member **19** scatters the light emitted from the light exit surface **13a** or the adhesive **12**. For the scattering member **19**, for example, a prism sheet, a transparent plate that contains therein a scattering member, and a transparent plate that has formed on the surface thereof unevenness having sufficient size to be capable of scattering light are used.

[0058] It is noted that the scattering member **19** is preferably closely applied to the light exit surface **13a** of the transparent substrate **13** and/or the side of the light exit surface of the adhesive **12**. Thus, in such a state that the scattering member **19** is closely applied, the amount of light reflected on the light incidence side of the scattering member **19** is extremely reduced.

[0059] Operation of the lighting unit **10** will now be explained.

[0060] For the organic EL element **14** of the lighting unit **10**, a voltage is applied between the first electrode **15** and the second electrode **17** by a drive control unit, which is not shown. Thus, the organic EL layer **16** emits light. That is, light is emitted from the organic EL layer **16**. The organic EL element **14** generally has isotropic light emitting characteristics. When each position of the organic EL layer **16** is regarded as a point light source, roughly the same amount of light is emitted from the position to all directions. The light thus emitted is emitted to the outside of the lighting unit **10** through the following route in accordance with the traveling direction.